

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous versions, and listings, of claims in the Application.

Listing of Claims:

Claim 1. (Previously presented) A system that facilitates interactions between one of a plurality of software components in an electronic device and an associated one of a plurality of servers, via a network, the system comprising:

a service broker capable of receiving at least one request for service associated with one of the plurality of software components;

the service broker capable of determining the one of the plurality of servers associated with the one of the plurality of software components, based upon a prior registration associating the one of the plurality of servers with the one of the plurality of software components making the at least one request for service; and

the service broker capable of forwarding the at least one request for service to the determined one of the plurality of servers.

Claim 2. (Previously presented) The system of claim 1 comprising:

the service broker capable of selectively communicating a response from the determined one of the plurality of servers to the one of the plurality of software components in the electronic device.

Claim 3. (Previously presented) The system of claim 1 wherein the service broker is a software component in the electronic device.

Claim 4. (Previously presented) The system of claim 1 wherein the one of the plurality of servers comprises a download server capable of receiving a request for an update package, the download server capable of sending the requested update package to the one of the plurality of software components in the electronic device.

Claim 5. (Previously presented) The system of claim 4 wherein the update package comprises a set of executable instructions for converting a first version of a software component to a second version of the software component.

Claim 6. (Previously presented) The system of claim 4 wherein the service broker forwards the update package to at least one of the plurality of software components in the electronic device.

Claim 7. (Previously presented) The system of claim 1 wherein the one of the plurality of software applications in the electronic device comprises an update agent capable of processing an update package, the update agent capable of being invoked by the service broker when an update package is communicated to the electronic device.

Claim 8. (Previously presented) The system of claim 7 wherein the update package comprises a set of executable instructions for converting a first version of a software component to a second version of the software component.

Claim 9. (Previously presented) The system of claim 1 wherein:
the at least one request for service comprises an asynchronous request; and
the service broker is capable of communicating a response received from the one of the plurality of servers back to the one of the plurality of software components.

Claim 10. (Previously presented) The system of claim 1 wherein:
the at least one request for service comprises an asynchronous request;
the one of the plurality of software components registers callback information with the service broker; and
the service broker communicates a response received from the one of the plurality of servers back to the one of the plurality of software applications based upon the registered callback information.

Claim 11. (Previously presented) The system of claim 1 wherein the service broker is a server communicatively coupled to the electronic device.

Claim 12. (Previously presented) The system of claim 11 wherein the service broker server determines which one of the plurality of servers is available and capable of processing the at least one service request, and subsequently forwards the request to the determined one of the plurality of servers.

Claim 13. (Previously presented) The system of claim 12 wherein the determined one of the plurality of servers is forwarded the at least one service request for processing, and a response from the determined one of the plurality of servers is forwarded to the one of the plurality of software components.

Claim 14. (Previously presented) The system of claim 12 wherein the determined one of the plurality of servers:

processes the at least one service request, the at least one service request comprising a request for a software update from the one of the plurality of software components;

retrieves an update package and associated information; and

communicates the update package and associated information to the electronic device.

Claim 15. (Previously presented) The system of claim 14 wherein:

the plurality of software components comprises a download agent and an update agent;

the download agent is capable of requesting a software update from the service broker server, and receiving in response an update package from the service broker server; and

the update agent is capable of processing the received update package for updating at least one of firmware and software in the electronic device.

Claim 16. (Previously presented) A wireless communication system supporting at least one electronic device, the system comprising:

a service broker communicatively coupled to the at least one electronic device;

a plurality of service providers, each of the plurality of service providers communicatively coupled to the service broker;

a client-side component in the at least one electronic device that requests a software update from one of the plurality of service providers; and

wherein the service broker determines the appropriate one of the plurality of service providers to respond to the software update request, based upon an association of the one of the plurality of service providers with the client-side component that made the request.

Claim 17. (Previously presented) The system of claim 16 comprising:

a generic intelligent responsive agent in the electronic device, the generic intelligent responsive agent communicatively coupled to the service broker;

the generic intelligent responsive agent capable of establishing a communication link with the service broker server;

the generic intelligent responsive agent capable of forwarding the software update request and associated information from the client-side component to the service broker server; and

the service broker server determining the one of the plurality of service providers as a target server capable of processing the software update request and forwarding the software update request to the target server.

Claim 18. (Previously presented) The system of claim 17 wherein the target server:

processes the received software update request;

retrieves an appropriate update package and associated information; and

communicates the appropriate update package and associated information back to the generic intelligent responsive agent for subsequent communication to the associated client-side component.

Claim 19. (Previously presented) The system of claim 18 wherein the generic intelligent responsive agent:

acts as a proxy for the client-side component; and
provides one of asynchronous communication and synchronous communication facilities for interactions with the target server.

Claim 20. (Previously presented) The system of claim 19 wherein the electronic device comprises:

a registration client capable of maintaining a plurality of registration entries, each registration entry associated with a client-side software component, each entry comprising at least one of a name, a version, a plurality of dependencies, a status that specifies current operational status, a plurality of callback functions, an associated parameter, an event, and a return type;

a set of configuration parameters;

a client-side software component specific update agent capable of updating at least one of the set of configuration parameters and the client-side software component; and

a server URL that specifies a service provider and associated relevant information.

Claim 21. (Previously presented) The system of claim 20 wherein the electronic device [[further]] comprises security information.

Claim 22. (Previously presented) A method for updating at least one of a software component and software component configuration information in an electronic device communicatively coupled to a service broker, the method comprising:

under the control of the electronic device,

registering at least one call-back function available in the software component, wherein each of the at least one call-back function is associated with a server;

communicating, to the service broker, a request for updating of at least one of the software component and software component configuration;

receiving results from a remote service provider; and

invoking the at least one call-back function using the received results; and under the control of the service broker,
receiving an update request;
determining a service provider based upon the update request;
invoking update functionality on the determined service provider; and transmitting results of the invoked update functionality to the mobile device.

Claim 23. (Previously presented) The method according to claim 22 comprising:

under the control of the electronic device,
communicating the received results to an update agent capable of updating the at least one of the software component and software component configuration.

Claim 24. (Previously presented) The method according to claim 22 comprising:

under the control of the electronic device,
communicating a request by the software component to a generic intelligent responsive agent, the request comprising a command to be invoked on the remote service provider and parameters to be passed to it;
communicating the request to the service broker; and
communicating the received results to the software component,
under the control of the service broker,
receiving the command request;
determining a service provider based upon the update request;
invoking update functionality on the determined service provider; and transmitting results of the invoked update functionality to the generic intelligent responsive agent.